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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY J. POND

Appeal 2009-003906
Application 10/820,931
Technology Center 3700

Decided: August 14, 2009

Before DEMETRA J. MILLS, LORA M. GREEN, and
RICHARD M. LEOVITZ, *Administrative Patent Judges*.

LEOVITZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on the Patent Applicant's appeal from the Patent Examiner's rejection of claims 1-5 and 9. Jurisdiction for this appeal is under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

The claims are to an adaptor to connect an irrigation tip to an ultrasonic dental scaler which is used for cleaning and treating teeth (Spec. 1:3-5). According to the Specification, the adaptor “provides means to use the scaler handpiece as an irrigation device, without ultrasonic energy being transferred to the irrigation tip from the ultrasonic handpiece.” (Spec. 3:3-6).

Claims 1-5 and 9 are appealed and stand rejected by the Examiner as follows:

1. Claims 1-5 and 9 under 35 U.S.C. § 112, second paragraph (Ans. 3);
2. Claim 1-5 and 9 under 35 U.S.C. § 112, first paragraph (Ans. 3);
3. Claims 1, 3-5, and 9 under 35 U.S.C. § 102(b) as anticipated by Feine (U.S. Pat. No. 6,164,968, Dec. 26, 2000) (Ans. 3-4); and
4. Claim 2 under 35 U.S.C. § 103(a) as obvious in view of Feine and Sharp (U.S. Pat. No. 6,086,369, Jul. 11, 2000) (Ans. 4).

Claim 1 is representative and reads as follows:

1. An adaptor for coupling a dental irrigation tip to an ultrasonic dental scaler handpiece, said dental scaler handpiece including ultrasonic vibration means, said dental handpiece being connectable to a power source for actuating said ultrasonic vibration means, said irrigation tip including a through bore, said dental handpiece including a conduit in fluid communication with a fluid source and in fluid communication with said adaptor, said adaptor comprising:

an elongated body having unitary, one-piece construction and having a distal end for connection to said irrigation tip and a proximal end for connection to said dental handpiece, said proximal end securely matingly connected said handpiece, said distal end securely matingly connected to said irrigation tip; and

a through bore located within said elongated body, said through bore in fluid communication with said conduit of said dental handpiece and said through bore of said irrigation tip.

INDEFINITENESS REJECTION

Claims 1-5 and 9 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention (Ans. 3).

Principles of Law

“The definiteness inquiry [under 35 U.S.C. § 112, second paragraph] focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the rest of the specification.” *Union Pacific Resources Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 692 (Fed. Cir. 2001).

Statement of the Issues

Claim 1

Claim 1 is to an adaptor for coupling a dental irrigation tip to an ultrasonic dental scaler handpiece. The claim preamble recites specific features of the irrigation tip and handpiece. The body of the claim recites that the adaptor has “an elongated body having unitary, one-piece construction”; that its distal end is “for connection to said irrigation tip”; and that its proximal end is “for connection to said dental handpiece.” Following this, the claim recites:

said proximal end securely matingly connected said handpiece,
said distal end securely matingly connected to said irrigation
tip.

The Examiner finds that the claim is directed to an adaptor, but also recites that its proximal and distal ends are “connected” to a dental scaler handpiece and irrigation tip, respectively. (Ans. 3.) The Examiner contends that it is therefore “unclear whether the handpiece and tip are intended to be positively claimed.” (*Id.*)

Appellant contends that the claim is directed only to the adaptor and that preamble of the claim reciting the irrigation tip and dental scaler handpiece “is used to establish the relationship between the adaptor, the handpiece, and the tip.” (App. Br. 6)

The issue is whether Appellant has established that the Examiner erred in finding claim 1 indefinite because it is unclear whether the handpiece and tip are claimed in combination with the adapter.

Claim 9

Claim 9 was objected also by the Examiner under 37 C.F.R. § 1.75(b)¹ as not being substantially different from claim 1 and therefore “unduly multiplied.” The Examiner contends that an objection under 37 C.F.R. § 1.75 can be petitioned, but not appealed.

Appellant contends that claim 9 is not unduly multiplicative because “claim 9 recites that the adaptor is disposable while claim 1 does not require such a limitation.” (App. Br. 5.) “As such, claims 1 and 9 do indeed claim different subject matter, and claim 9 should not be objected to over claim 1.” (*Id.*)

¹ “More than one claim may be presented provided they differ substantially from each other and are not unduly multiplied.”

Appellant also asserts that “issue with respect to claim 9 is an issue of patentability, as the Examiner is attempting to limit what the Applicant believes that he is entitled.” (Reply Br. 2.) Therefore, Appellant contends that the “objection to claim 9 is an appealable matter properly put forth in the present appeal.” (*Id.*)

Analysis

Claim 1

Claim 1 is directed to an “adaptor” recited in the claim preamble to be for connecting a dental irrigation tip to an ultrasonic dental scaler handpiece. The body of the claim, however, recites that the adaptor ends are “connected” to the tip and handpiece. Accordingly, we conclude that the Examiner is correct that it is unclear whether the claim is to the adaptor, alone, or the adaptor combined with the irrigation tip and scaler handpiece. The Specification describes both configurations (Spec. 6) and therefore does not elucidate the claim language. When a claim is susceptible to two or more plausible claim interpretations, the claim is indefinite under § 112, second paragraph. *Ex parte Miyazaki* (No. 2007-3300, BPAI, Nov. 19, 2008). The rejection of claim 1 is therefore affirmed. As claim 9 recites the same language, we affirm the rejection of claim 9 for the same reasons.

Claim 9

In objecting to claim 9 for undue multiplicity, the Examiner did not follow the correct procedure as set forth in the Manual of Patent Examining

Procedure. See M.P.E.P. § 2173.05(n) (Rev. July 2008).² Thus, the claim is not properly before us on appeal.

WRITTEN DESCRIPTION REJECTION

Claims 1-5 and 9 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement (Ans. 3).

Statement of Issue

The Examiner contends that the claimed limitation in independent claims 1, 5, and 9 of an adaptor comprising an elongated body “having unitary, one-piece construction” was not described in the Specification in such a way as to reasonably convey to a person of ordinary skill in the art that the inventor had possession of the claimed invention (Ans. 3).

Appellant contends that the claimed feature of “unitary, one-piece construction” is supported by Figures 4 and 7-11 (App. Br. 6; Reply Br. 2).

Principles of Law

The words used in the claims need not appear verbatim in the Specification in order to satisfy the written description requirement; what is needed is a description that shows possession of what is later claimed to a person of ordinary skill in the art. *Purdue Pharma L.P. v. Faulding, Inc.*,

² “If an undue multiplicity rejection under 35 U.S.C. 112, second paragraph, is appropriate, the examiner should contact applicant by telephone explaining that the claims are unduly multiplied and will be rejected under 35 U.S.C. 112, second paragraph . . . This procedure [as described in § 2173.05(n)] preserves applicant’s right to have the rejection on undue multiplicity reviewed by the Board of Patent Appeals and Interferences.”

230 F.3d 1320, 1323 (Fed. Cir. 2000). “[U]nder proper circumstances, drawings alone may provide a ‘written description’ of an invention as required by § 112.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1565 (Fed. Cir. 1991).

Analysis

Figures 4 and 7-11 of the Specification show an adaptor 120 for connecting an irrigation tip to a dental scaler handpiece. Figure 4 is representative and is reproduced below:

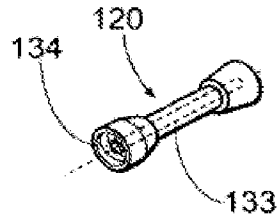


Figure 4 shows adaptor 120 with through bore 133 (shown in phantom) and exit portal 134 (Spec. 7).

We interpret the claimed “elongated body having unitary, one-piece construction and having a distal end for connection to said irrigation tip and a proximal end for connection to said dental handpiece” to cover an adapter body with its connecting distal and proximal ends. Figure 4 shows an elongated body portion comprising distal and proximal ends for connecting the adaptor to the tip and handpiece, respectively. The ends of the adaptor have a larger outer diameter than the body portion between them. Thus, the claim reads on the body portion with enlarged ends as depicted in Figure 4.

It cannot be discerned from the drawing whether the larger outer diameter ends are attached during manufacturing to the smaller outer diameter body portion or whether the assembly is made from a single piece as required by the claims. Appellants did not explain how Figure 4, or how

claims 7-11, support the claim limitation that the elongated body has “unitary, one-piece construction”, but merely made the assertion without clarification.

Because the drawings do not support the claim limitation of an “elongated body having unitary, one-piece construction”, we affirm the written description rejection of claims 1, 5 and 9.

ANTICIPATION REJECTION

Claims 1, 3-5, and 9 stand rejected under 35 U.S.C. § 102(b) as anticipated by Feine (Ans. 3-4).

Principles of Law

Because the hallmark of anticipation is prior invention, the prior art reference – in order to anticipate under 35 U.S.C. § 102 – must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements “arranged as in the claim.” *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983).
Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1369 (Fed. Cir. 2008).

Facts (F)

The Feine patent

1. Feine describes a three-part ultrasonic dental insert used in a handpiece (Abstract).
2. The insert includes a magnetostrictive element (12), a velocity transducer (14), and a tip (Abstract).
3. The assembled insert is placed inside a handpiece by frictional engagement (col. 4, ll. 41-44).

4. Figure 4, reproduced below, shows a longitudinal section of a velocity transducer section.

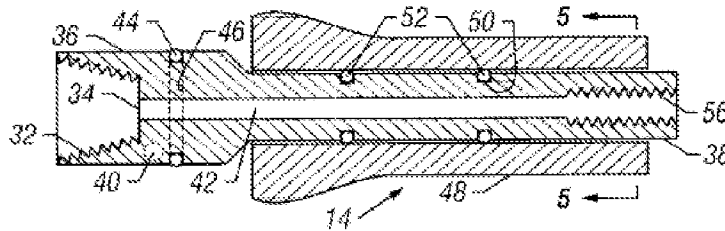


FIG. 4

Figure 4 show the velocity transducer 14 which comprises sections 36 and 38 and a finger grip 48 that snaps on to section 38 (col. 4, ll. 1-15).

5. The transducer has a central passage 42 for water to flow through (col. 3, ll. 65-67).

6. At one end, a threaded section 32 receives the magnetostrictive element 12 (col. 3, ll. 55-65).

7. At the other end, the transducer has passage with terminal threads 56 for engaging the tip 16 (col. 4, ll. 24-37).

8. Figure 8, reproduced below in part, is a longitudinal section view of a handpiece containing the insert (col. 3, ll. 16-17):

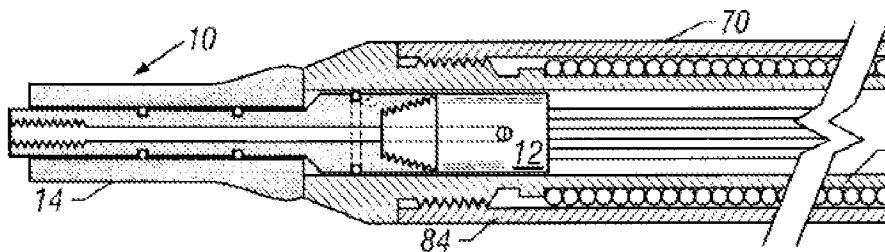


FIG. 8

Figure 8 shows the insert placed inside handpiece 70, with the inner cylindrical piece 82 of the handpiece gripped around the end of the insert

opposite the tip holding end (col. 4, ll. 24-27 & 57-65). The velocity transducer 14 and the magnetostrictive element 12 are shown inserted inside handpiece 70.

9. “The velocity transducer 14 is generally machined from thick-walled tubing of suitable autoclavable material, such as stainless steel, for example.” (Col. 4, ll. 21-23.)

Claim 1

The following findings summarize the correspondence between Feine’s velocity transducer and the claimed adaptor:

10. Feine describes a velocity transducer with sections 36 and 38 which is connected to a tip 16 at one end (F4, 7) and a handpiece 70 (F8). The velocity transducer therefore serves as an adaptor having an elongated body and with ends for connecting the adaptor to an irrigation tip and handpiece as recited in claim 1.

11. The velocity transducer is machined from an autoclavable material, such as stainless steel (F9), and therefore has the claimed “unitary, one-piece construction.”

12. The velocity transducer has a central passage 42 for water flow (F5) and therefore meets the claim limitation of “a through bore located within said elongated body.

Analysis

The Examiner has the burden of establishing that the prior art, expressly or inherently, describes all elements of the claimed invention as arranged in the claim. *See Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d at

1369. In this case, as found by the Examiner on pages 3-4 of the Answer and summarized in Facts 10-12, all the elements recited in claim 1 are present in the assembly described by Feine. Whether the claim is interpreted to be drawn to the adaptor alone, or the adaptor connected to a tip and handpiece, we exercise our discretion to address the merits of the anticipation rejection, and we determine that all the claim limitations are met.³ Having met the burden, we turn to Appellant's arguments to determine whether an error was made.

Appellant contends that Feine describes a three part dental insert in which all three pieces are required for the device (App. Br. 7). Appellant asserts:

As shown in Figure 8, Feine shows a multi-part adaptor, with the main sections being shown as reference numeral #12, #14, and #16 (see Figure 6 for #16). Figure 8 demonstrates that 14 is a separate piece from 12, and, further, that the adaptor also includes an insert 10, that engages a handpiece. See Col. 4, lines 41-45. The adaptor of Feine necessarily includes all of these pieces.

(App. Br. 7).

Component 14 corresponds to Feine's velocity transducer (F4). Component 12 is the magneto-restrictive element (col. 3, ll. 24-25); component 16 is the tip (F6). The Examiner found that component 14, the velocity transducer, met all the requirements of the claim. The claim does not exclude the adaptor – Feine's velocity transducer – from comprising

³ When claims are indefinite, rejecting ... based on speculation and assumptions is legal error. *In re Steele*, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962). However, a claim can sometimes be analyzed ... even though it is indefinite. *In re Steele* distinguished. *Ex parte Saceman*, 27 USPQ2d 1472, 1474 (Bd. Pat. App. Int. 1993).

further elements, as long as it meets the structural requirements of the claim. Therefore, Appellant's argument is not persuasive.

Appellant also argues that reference numeral 14 is "definitely not of one-piece construction." (Reply Br. 4.) This argument is not supported by the evidence. Feine expressly states that transducer 14 "is generally machined from thick-walled tubing of suitable autoclavable material" (F9), providing reasonable basis to believe that the transducer is made from a single piece of tubing – and therefore is of one-piece construction.

Appellant also contends that the Examiner has ignored component 12 which is "a necessity for Feine to properly function and operate." (Reply Br. 4.) Appellants states: "The Examiner has also noted that Figure 4 also includes O-rings located between reference numerals 12 and 14, which would only be used if reference numerals 12 and 14 were separate sections and not a unitary piece." (*Id.* at 4)

This argument is not persuasive. The Examiner found that element 14, the velocity transducer, met all structural limitations of claim 1. The Examiner did not ignore 12. 12 is the magneto-restrictive element which fits into the transducer (F6); it does not correspond to the claimed adaptor nor does the claim exclude a magneto-restrictive element.

Component 14 is of one-piece construction, has a through bore, an elongate body, and ends connecting to a tip 16 and handpiece 70 – and thus meets all elements of the claimed invention.

OBVIOUSNESS REJECTION

Claim 2 stands rejected under 35 U.S.C. § 103(a) as obvious in view of Feine and Sharp (Ans. 4).

The Examiner found:

Feine discloses an adaptor that shows the limitations as described above; however, Feine does not show a means for restricting ultrasonic vibrations. Sharp et al. teach an ultrasonic dental scaler comprising a means for restricting ultrasonic vibrations 29. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the means of Sharp et al. in order to dampen flexural vibrations and make the motion of the tip less erratic in view of Sharp et al.

(Ans. 4).

Appellant does not identify any deficiency in the Examiner's findings. As the Examiner provided a fact-based rationale for concluding that the claim 2 was obvious, we affirm the rejection of the reasons set forth by the Examiner.

SUMMARY

The rejections under § 112, first and second paragraphs, of claims 1, 5 and 9 are affirmed. Claims 3 and 4 fall with claims 1, 5, and 9 because separate arguments for their patentability were not provided. 37 C.F.R. § 41.37(c)(1)(vii).

The anticipation rejection of claim 1 is affirmed. Claims 3-5 and 9 fall with claim 1 because separate reasons for their patentability were not provided. 37 C.F.R. § 41.37(c)(1)(vii).

The obviousness rejection of claim 2 is affirmed.

Appeal 2009-003906
Application 10/820,931

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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